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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,980	09/12/2003	Dennis Person	81091145	9323

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MACMILLAN, SOBANSKI & TODD, LLC
ONE MARITIME PLAZA - FOURTH FLOOR
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TOLEDO, OH 43604

EXAMINER

GIBSON, ERIC M

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,980

Applicant(s)

PERSON ET AL.

Examiner

Eric M Gibson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/12/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-6 and 10 are objected to because of the following informalities:
 - a. In claim 1, line 1, --an— should be inserted between “system of” and “automatic transmission”.
 - b. Claims 2-6 and 10 are necessarily objected as being dependent upon an objected base claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5, 6, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. Claim 5 recites the limitation “the valve” in lines 12, 14, and 15. This limitation is indefinite because more than one “valve” is recited in the claim. In claim 1, from which claim 5 depends, a valve is recited at line 7. In claim 5, line 4, a second valve is recited. It is unclear which of these valves is the valve referred to at lines 12, 14, and 15.
 - b. Claim 6 also recites the limitation “the valve” in lines 13, 17, 19, and 20 and is indefinite for the reasons above in regards to claim 5.

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c. Claim 10 recites the limitation "the cooler" in line 4. There is insufficient antecedent basis for this limitation in the claim. It is noted that claim 10 claims dependence from independent claim 1, which does not recite the limitation of a cooler. However, independent claim 7, from which claims 8, 9, 11, and 12 depend, does recite the limitation of "an oil cooler". It is believed that claim 10 was intended to depend from independent claim 7, rather than claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Parquet (US003913453A).

a. Per claim 1, Parquet teaches a hydraulic system of an automatic transmission including a fluid source (claim 1, line 2), a component of the system through which hydraulic fluid flows (claim 1, lines 2-4), a circuit hydraulically connecting the fluid source to the component (claim 1, lines 4-7), a reservoir for containing fluid at relatively low pressure (claim 1, line 2), and a valve hydraulically connected by the circuit to the component, the source, and the reservoir, the valve having a first state at which a hydraulic connection between the component and the reservoir is closed, and a

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second state at which a hydraulic connection through the valve between the component and the reservoir is open (claim 1, lines 7-9).

b. Per claim 2, Parquet further teaches a chamber hydraulically connected to the circuit, the fluid source, and the reservoir through mutually spaced ports in the chamber (claim 3, lines 8-11), a spool moveable in the chamber, including a first land on which a pressure force tending to move the spool to the first state is produced in response to fluid pressure, and a second land for opening and closing communication between the component and the reservoir as the spool moves in the chamber (claim 3, lines 11-15), and a spring for biasing the spool to the second state in opposition to the pressure force (claim 3, lines 15-19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 3, 4, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parquet in view of Barrie et al. (US005217085A).

a. Per claim 3, Parquet teaches the invention as explained in the rejection of claim 1. Parquet does not teach that the system further comprises an oil cooler in parallel with a lubrication circuit or second valve for alternately opening and closing a connection between the fluid source and the lubrication circuit in response to the temperature of the fluid. Barrie teaches a lubrication and cooling system for a power train that includes an oil cooler (40, figure 1) in parallel with a lubrication circuit (14, figure 1) and a second valve (34, figure 1) for alternately opening and closing a connection between the fluid source and the lubrication circuit in response to the temperature of the fluid (column 1, line 50 – column 2, line 2). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include an oil cooler and temperature responsive valve as taught by Barrie, in a transmission system, such as that of Parquet, in order to increase the efficiency of the system, as taught by Barrie.

b. Per claim 4, Parquet teaches the invention as explained in the rejection of claim 1. Parquet does not teach that the system further comprises a lubrication circuit and a second valve for opening and closing a connection between the fluid source and the lubrication circuit in response to the temperature of the fluid. Barrie teaches a lubrication and cooling system for a power train that includes a lubrication circuit (14, figure 1) and a second valve (34, figure 1) for opening and closing a connection

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between the fluid source and the lubrication circuit in response to the temperature of the fluid (column 1, line 50 – column 2, line 2). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include a temperature responsive valve as taught by Barrie, in a transmission system, such as that of Parquet, in order to increase the efficiency of the system, as taught by Barrie.

c. Per claim 7, Parquet teaches a hydraulic system of an automatic transmission including a fluid source (claim 1, line 2), a component of the system through which hydraulic fluid flows (claim 1, lines 2-4), a circuit hydraulically connecting the fluid source to the component (claim 1, lines 4-7), a reservoir for containing fluid at relatively low pressure (claim 1, line 2), and a valve hydraulically connected by the circuit to the component, the source, and the reservoir, the valve having a first state at which a hydraulic connection between the component and the reservoir is closed, and a second state at which a hydraulic connection through the valve between the component and the reservoir is open (claim 1, lines 7-9). Parquet does not teach that the system further comprises an oil cooler at a higher elevation than a reservoir. Barrie teaches a lubrication and cooling system for a power train that includes an oil cooler (40, figure 1) at a higher elevation than a reservoir (12, figure 1). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include an oil cooler at a higher elevation than a reservoir in a transmission system, such as that of Parquet, in order to increase the efficiency of the system, as taught by Barrie.

d. Per claim 8, Parquet further teaches a chamber hydraulically connected to the circuit, the fluid source, and the reservoir through mutually spaced ports in the

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chamber (claim 3, lines 8-11), a spool moveable in the chamber, including a first land on which a pressure force tending to move the spool to the first state is produced in response to fluid pressure, and a second land for opening and closing communication between the component and the reservoir as the spool moves in the chamber (claim 3, lines 11-15), and a spring for biasing the spool to the second state in opposition to the pressure force (claim 3, lines 15-19).

e. Per claim 9, Barrie further teaches that the oil cooler (40, figure 1) is in parallel with a lubrication circuit (14, figure 1) and a second valve (34, figure 1) for alternately opening and closing a connection between the fluid source and the lubrication circuit in response to the temperature of the fluid (column 1, line 50 – column 2, line 2).

f. Per claim 10, Barrie further teaches that the oil cooler (40, figure 1) is in parallel with a lubrication circuit (14, figure 1) and a second valve (34, figure 1) for opening and closing a connection between the fluid source and the lubrication circuit in response to the temperature of the fluid (column 1, line 50 – column 2, line 2).

5. Claims 5, 6, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Parquet and Barrie as applied to claims 1-4 and 7-10 above, and further in view of Becker et al. (US005890509A).

a. As per claims 5, 6, 11, and 12, the combination of Parquet and Barrie teaches the invention as explained in the above rejections of claims 1 and 7. Barrie further teaches an oil cooler (40, figure 1) in parallel with a lubrication circuit (14, figure 1) and a second valve (34, figure 1) for alternately opening and closing a connection

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between the fluid source and the lubrication circuit in response to the temperature of the fluid (column 1, line 50 – column 2, line 2). The combination of Parquet and Barrie does not explicitly teach that the automatic transmissions include a torque converter with a bypass clutch as claimed in claims 5, 6, 11, and 12. However, a torque converter is a common element of automatic transmissions and the elements of a bladed impeller wheel and a bladed turbine wheel are inherent parts of a typical torque converter. One such typical converter is illustrated by the system of Becker in column 2, lines 49-67). Furthermore, Becker illustrates the capability of a typical automatic transmission with a torque converter and bypass clutch to utilize a cooler bypass in parallel with a lubrication system (column 12, lines 10-67), such as that taught by the combination. It would have been obvious to one of ordinary skill in the art, at the time of invention, to include a torque converter as a typical element of an automatic transmission in the system of the combination, and able to be used with a cooler bypass in parallel with a lubrication system, as evidenced by the teaching of Becker.

Conclusion

6. The references made of record and not relied upon are considered pertinent to applicant's disclosure. Kozaki et al. (US005911647A) teaches a control apparatus for an automatic transmission. Wakahara (US005584370A) teaches a lock-up type automatic transmission system with a hydraulic fluid cooling device. Sumiya et al. (US004748809A) teaches a hydraulic servo mechanism of an automatic transmission for a vehicle. Suzuki et al. (US004502354A) teaches a hydraulic pressure control

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system for an automatic transmission. Marquart (US004296649A) teaches a hydraulically operated transmission control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Gibson whose telephone number is (703) 306-4545. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG



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